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Indian Standard

2006 REASTIRMED 75

#### SPECIFICATION FOR STERILIZER, SHALLOW ( DRESSING DRUM )

(Second Revision)

- 1. Scope Requirements of shallow sterilizer (dressing drum) used for sterilizing and storing various types of dressings, instruments and surgical requisites in hospitals, clinics and dispensaries.
- 2. Material The following components shall be made from material shown against each:

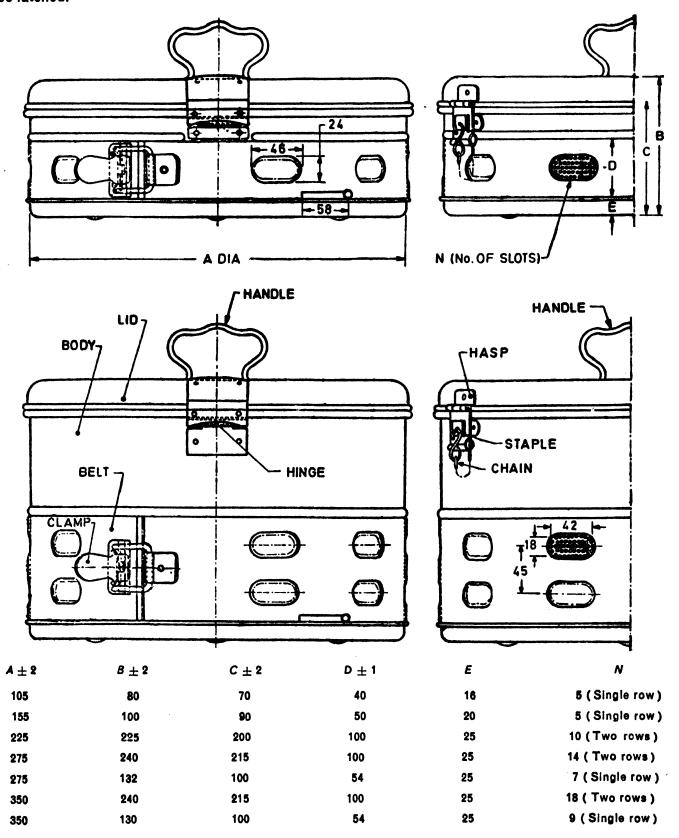
| SI No. Component |                 | Material   | Thickness or<br>Diameter<br>mm |  |
|------------------|-----------------|--|--------------------------------|--|
| i)               | Body, lid, belt | Stainless steel conforming to Designation 04Cr18Ni10 or 07Cr18Ni9 and of 2B finish as per IS: 6911-1972 'Specification for stainless steel plate, sheet and strip' | 0.20                           |  |
| ii)              | Hasp            | do   | 1.00                           |  |
| iii)             | Hinge wire      | Stainless steel wire conforming to IS: 6528-<br>1972 'Specification for stainless steel<br>wire'   | 3.00                           |  |
| iv)              | Handle          | do   | 4.0 to 5.0                     |  |
| v)               | Chain           | do   | 0.90                           |  |
| vi)              | Clamp           | do   | 2.80 to 3.55                   |  |

- 3. Shape and Dimensions The shape and dimensions shall be as shown in Fig. 1.
- 3.1 Tolerance The tolerance on thickness of sheet or diameter of wire shall be governed by the relevant specification. The maximum permissible reduction in thickness for the body and lid shall be 0.15 mm.
- 4. Workmanship and Finish The shallow sterilizer shall be pressed seamless so as to make it cylinderical.
- 4.1 The base shall rest on three or more supports without shake or play.
- 4.2 The lid shall have a snap fit on the body.
- 4.3 The hinges shall allow a free swivel of the lid and the movement shall be such as to make the lid come back truly to its position of closing without any side pressure being applied.
- 4.4 The hasps shall engage with and disengage from the staple easily.
- **4.5** The belts shall fit snugly and bear uniformly on the surface of the drum without any pockets or undue\_rubbing at any place.
- 4.6 The clip when clamped shall keep the belt in a fair tension and shall not recoil.
- 4.7 The tension shall be such as to pass the test specified in 6.
- 4.8 The clip in its open position shall enable the belt to slide round the body easily.
- 4.9 The slots on the belt and the sets of perforations on body shall correspond so as to register precisely.
  - 4.9.1 The sets of perforations on body shall have 39 holes of 2'4 mm dia each.

Adopted 10 December 1979 © February 1980, BIS

#### IS: 3831 - 1979

- 4.10 The stop on the body provided to restrict the movement of the belt shall be such that in one extreme position of the belt the holes get completely closed and in the other extreme position, they coincide with the slots of the belt.
- 4.11 The chain shall be of sufficient length to reach the staple and enable the shallow sterilizers to be latched.



All dimensions in millimetres.

FIG. 1 STERILIZER SHALLOW (DRESSING DRUM)

#### AMENDMENT NO. 3 MAY 1993 TO IS 3831: 1979 SPECIFICATION FOR STERILIZER, SHALLOW (DRESSING DRUM)

(Second Revision)

(Page 1, clause 3) — Substitute the following for the existing clause:

(Page 2, Fig. 1, Informal table) — Substitute the following for the existing table:

| A ± 2 | <i>B</i> ± 2 | C± 2 | $D \pm 1$  | E  | Overall Dia ± 5 | Overall<br>Height ± 4 | N               |
|-------|--------------|------|------------|----|-----------------|-----------------------|-----------------|
| 105   | 80           | 70   | 40         | 16 | 130             | 85                    | 5 (Single row)  |
| 155   | 100          | 90   | <i>5</i> 0 | 20 | 180             | 105                   | 5 (Single row)  |
| 225   | 225          | 200  | 100        | 25 | 250             | 230                   | 10 (Two rows)   |
| 275   | 240          | 215  | 100        | 25 | 300             | 245                   | 14 (Two rows)   |
| 275   | 132          | 100  | 54         | 25 | 300             | 135                   | 7 (Single rows) |
| 350   | 240          | 215  | 100        | 25 | 375             | 245                   | 18 (Two rows)   |
| 350   | 130          | 100  | 54         | 25 | 375             | 130                   | 9 (Single rows) |

(MHD 14)

<sup>&#</sup>x27;Recommended shape and dimensions of the sterilizer, shallow (dressing drum) are shown in Fig. 1.'

#### AMENDMENT NO. 4 JANUARY 1996 TO

#### IS 3831:1979 SPECIFICATION FOR STERILIZER, SHALLOW (DRESSING DRUM)

(Second Revision)

[ Page 2, Informal table, line 5, column 2 (see also Amendment No. 3)]:

- a) Substitute dimension '125' for dimension '132'.
- b) Add the following note below the table:

'NOTE — Overall dimensions of diameter and height are given for the purpose that the drum fits into the sterilizer.'

[Informal Table, column 5 (see also Amendment No. 3)] — Substitute  $E \pm 5$  for E in the first row.

(MHD 14)

### AMENDMENT NO. 2 DECEMBER 1992 TO IS 3831:1979 SPECIFICATION FOR STERILIZER, SHALLOW (DRESSING DRUM)

(Second Revision)

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(Second Revision)

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- b) Add the following note below the table:

'NOTE - Overall dimensions of diameter and height are given for the purpose that the drum fits into the sterilizer.'

[Informal Table, column 5 (see also Amendment No. 3)] — Substitute  $E \pm 5$  for E' in the first row.

(MHD 14)

#### AMENDMENT NO. 2 DECEMBER 1992 TO

#### IS 3831: 1979 SPECIFICATION FOR STERILIZER, SHALLOW (DRESSING DRUM)

(Second Revision)

[ Page 1, clause 2 (i), col 3 ] — Substitute '2D' for '2B'.

[ Page 1, clause 2 (ii), col 4 ] — Substitute '1.00  $\pm$  0.1' for '1.00'.

[ Page 1, clause 2 (iv) ] — Delete.

[ Page 1, clause 2 (vi), col 4 ] — Substitute '3 nominal' for '2.80 to 3.55'.

[ Page 1, clause 2 (vi) ] — Insert the following new clauses after 2 (vi):

- '2.1 Flattening of the hinge wire ends shall be done in such a manner so that hinges do not come out with constant use.
- 2.2 A tolerance of  $\pm$  0.2 mm on the nominal diameter of the handle shall be permitted.
- 2.3 A suitable chain minimum 0.9 mm diameter shall be used.'

(Page 1, clause 4.9.1) — Substitute '2.4  $\pm$  0.2' for '2.4'.

(Page 3, clause 5) — Substitute the following for the existing clause:

'Finish of the different parts shall be as agreed to between the purchaser and the supplier'.

( Page 3, clause 7 ) — Substitute 'indication of the source of manufacturer' for 'manufacturer's name'.

( Page 3, clause 7.1 ) — Delete.

(MHD 14)

## JULY 1990 AMENDMENT NO. 1

# 18 3831 1979 SPECIFICATION FOR STERILIZER, SHALLOW ( DRESSING DRUM )

## / Second Revision /

(Page 1, clause 2) — The material as specified under col 2 against rows (ii) to (iv), that is, for hasp, hinge wire, handle shall be the recommended material.

( Page 1, clause 4.9.1 ) — Substitute '35 to 39 holes' for '39 holes'.

(Page 2, Fig. 1) — The tolerance on dimensions which are not given in the informal table in Fig. 1 shall be  $\pm 1$  mm.

( Page 2, Fig. 1, col 5, informal table ) — Substitute 'E±5' for 'E' the first row.

( MHD 14)

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- 5. Finish All stainless steel parts shall be finished smooth and polished bright.
- 6. Tests When the belt is clamped, the dressing drum shall be examined for any gap between the drum and the belt. Also any high spots on the body and low spots on the belt which would make the movement of the belt jerky shall be examined. When a force of 70 N (7 kgf approx) is applied on the belt in the closed position, it shall not slide.
- 7. Marking The shallow sterilizer shall be marked with the manufacturer's name, initials or recognized trade-mark properly impressed.
- 7.1 Certification Marking Details available with the Bureau of Indian Standards.
- 8. Packing As agreed to between the purchaser and the supplier.

#### EXPLANATORY NOTE

Some changes in various dimensions were considered necessary to be incorporated in the existing standard and this revised version caters to such changes.